



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

K10003

Job Sheet 184824



6110

Part No: K10003

Job Qty: 4 ea

Part Name: Saddle



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 10/17/18

Job Tracking No:

Due Date: 11/16/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG REV H IPP: I 03.01.16 Reformat: Incorporated D205-641-011 KJ/RF IPP : J 06-07-25 As per DSI 9344
JLM IPP : K 06.11.17 Per K10003 Rev C KJ IPP : L 07.01.12 Document Record for copying bluefile rmv KJ
IPP Rev:M 08-08-12 now @ chg 006 (DSI 9418) DD verified: IPP N 09.01.27 DSI 9418 rev B EC verified:DD
IPP Rev:O 11.03.11 per dsi9536 DD ver:EC IPP REV:P 12.01.23 AS PER ECN11-684 VER:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	4 Ea	11/16/18	11/16/18	0.00	0.00	Start Up Stores/Pkg-1	DAS 9-89	OCT 26 2018
110	Packaging	4 pcs	11/16/18	11/16/18	0.00	0.00	Packaging1-5	6 NOV 2 3 2018	DAS 9-89
120	QC	4 pcs	11/16/18	11/16/18	0.00	0.00	QC4	9-89	NOV 2 3 2018
130	Packaging	4 pcs	11/16/18	11/16/18	0.00	0.00	Packaging3-2	46 NOV 2 3 2018	9-89
135	DC	4 pcs	11/16/18	11/16/18	0.00	0.00	DC	9-89	NOV 2 3 2018
140	QC21-FG	4 Ea	11/16/18	11/16/18	0.00	0.00	QC21	9-89	NOV 2 3 2018

Part Op 110 - AN960JD616 EQUIVALENT TO NAS1149D0663J
Descriptions: 135 - Create White labels only per PPP K10003

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
AN4-51A	Bolt	32 Ea (8 ea)	90-Start up Operation	3092511
AN4-6A	Bolt	64 Ea (16 ea)	90-Start up Operation	5053945
AN4C46A	Bolt	16 Ea (4 ea)	90-Start up Operation	5100406
AN6-12A	Bolt	32 Ea (8 ea)	90-Start up Operation	50843361
D2570-PD	Bushing	96 Ea (24 ea)	90-Start up Operation	5116300
D2571	Saddle, Fwd, Out	4 Ea (1 ea)	90-Start up Operation	5124389
D2572	Saddle, Fwd, In	4 Ea (1 ea)	90-Start up Operation	5124386
D2573	Saddle, Aft, Out	4 Ea (1 ea)	90-Start up Operation	5124384
D2574	Saddle, Aft, In	4 Ea (1 ea)	90-Start up Operation	5126438
D2747	Set Screw	16 Ea (4 ea)	90-Start up Operation	5050339
D2876	Saddle Spacer	8 Ea (2 ea)	90-Start up Operation	5066646
D2877	Saddle Spacer	8 Ea (2 ea)	90-Start up Operation	5088897
D3405-041	Ground Handling Lug	4 Ea (1 ea)	90-Start up Operation	5101286
D3405-043	Ground Handling Lug	4 Ea (1 ea)	90-Start up Operation	5101288
D3407-041	Tow Ring 5126120X1	4 Ea (1 ea)	90-Start up Operation	5113054V1 5125843X2
D3417-5	Washer	8 Ea (2 ea)	90-Start up Operation	5116319
D3456-1	Washer	4 Ea (1 ea)	90-Start up Operation	5079335
D3533-1	Set Screw	8 Ea (2 ea)	90-Start up Operation	5050331
MS21042L4	Nut	96 Ea (24 ea)	90-Start up Operation	5094597
MS21043-4	Nut	20 Ea (5 ea)	90-Start up Operation	5092684

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
	Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																	
	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																	
	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																	
Large Fab ☐	Composite ☐	Supplier ☐																			

Date :	Step #:	QTY Effective :	MRB (QSI042) Approval
--------	---------	-----------------	-----------------------

Description Work Order Deviation	Disposition
Completed By _____ Supervisor Verification _____ Director _____ Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 CANADA TEL: 1 613 630-6200 Email: sales@dartaero.com www.dartaerospace.com	

Root Cause <table> <tr><td>Environment</td><td>☐</td><td>No Re-verification</td><td>☐</td></tr> <tr><td>Design</td><td>☐</td><td>Operator</td><td>☐</td></tr> <tr><td>Doc/Data</td><td>☐</td><td>Offset/Setup</td><td>☐</td></tr> <tr><td>Equip/Tooling</td><td>☐</td><td>Supplier</td><td>☐</td></tr> <tr><td>Handling/Pre</td><td>☐</td><td>Training</td><td>☐</td></tr> <tr><td>Material</td><td>☐</td><td>Use for Testing</td><td>☐</td></tr> <tr><td>Internal Transport</td><td>☐</td><td>Poor Information</td><td>☐</td></tr> <tr><td>Tribal Knowledge</td><td>☐</td><td>Rushing</td><td>☐</td></tr> <tr><td>LOA</td><td>☐</td><td>Product Improvement</td><td>☐</td></tr> <tr><td>Substation</td><td>☐</td><td>Process Improvement</td><td>☐</td></tr> <tr><td>Past Expiry Date</td><td>☐</td><td>Manufacturing Process</td><td>☐</td></tr> <tr><td>Misidentified</td><td>☐</td><td>Past Due</td><td>☐</td></tr> </table>		Environment	☐	No Re-verification	☐	Design	☐	Operator	☐	Doc/Data	☐	Offset/Setup	☐	Equip/Tooling	☐	Supplier	☐	Handling/Pre	☐	Training	☐	Material	☐	Use for Testing	☐	Internal Transport	☐	Poor Information	☐	Tribal Knowledge	☐	Rushing	☐	LOA	☐	Product Improvement	☐	Substation	☐	Process Improvement	☐	Past Expiry Date	☐	Manufacturing Process	☐	Misidentified	☐	Past Due	☐	FAULT CATEGORY <table> <tr><td>Pressure/Forced</td><td>☐</td><td>Temperature/Cure</td><td>☐</td><td>Power Lc</td><td>☐</td></tr> <tr><td>Bending</td><td>☐</td><td>Set-up</td><td>☐</td><td>Folio/Pro</td><td>☐</td></tr> <tr><td>Centre Not Concentric</td><td>☐</td><td>BOM/Route</td><td>☐</td><td>Grain</td><td>☐</td></tr> <tr><td>Cracks</td><td>☐</td><td>Broken/Damage/Defect</td><td>☐</td><td>Weld</td><td>☐</td></tr> <tr><td>Crimp/Kink/Ripple/Wave</td><td>☐</td><td>Inspection Incomplete/Unqualified</td><td>☐</td><td>Wrong Sto</td><td>☐</td></tr> <tr><td>Cuffs</td><td>☐</td><td>Contamination</td><td>☐</td><td>Out of Sequence</td><td>☐</td></tr> <tr><td>Crushing</td><td>☐</td><td>Countersink</td><td>☐</td><td>Off-set</td><td>☐</td></tr> <tr><td>Heat Treat</td><td>☐</td><td>Cut Too Short</td><td>☐</td><td>Mislabeled</td><td>☐</td></tr> <tr><td>Wave/Twist in Tube</td><td>☐</td><td>Instructions Incomplete/Unclear</td><td>☐</td><td>Fit/Function</td><td>☐</td></tr> <tr><td>Marks/Chatter</td><td>☐</td><td>Drill Holes</td><td>☐</td><td>Misaligned/off center</td><td>☐</td></tr> </table>		Pressure/Forced	☐	Temperature/Cure	☐	Power Lc	☐	Bending	☐	Set-up	☐	Folio/Pro	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Sto	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Crushing	☐	Countersink	☐	Off-set	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐
Environment	☐	No Re-verification	☐																																																																																																												
Design	☐	Operator	☐																																																																																																												
Doc/Data	☐	Offset/Setup	☐																																																																																																												
Equip/Tooling	☐	Supplier	☐																																																																																																												
Handling/Pre	☐	Training	☐																																																																																																												
Material	☐	Use for Testing	☐																																																																																																												
Internal Transport	☐	Poor Information	☐																																																																																																												
Tribal Knowledge	☐	Rushing	☐																																																																																																												
LOA	☐	Product Improvement	☐																																																																																																												
Substation	☐	Process Improvement	☐																																																																																																												
Past Expiry Date	☐	Manufacturing Process	☐																																																																																																												
Misidentified	☐	Past Due	☐																																																																																																												
Pressure/Forced	☐	Temperature/Cure	☐	Power Lc	☐																																																																																																										
Bending	☐	Set-up	☐	Folio/Pro	☐																																																																																																										
Centre Not Concentric	☐	BOM/Route	☐	Grain	☐																																																																																																										
Cracks	☐	Broken/Damage/Defect	☐	Weld	☐																																																																																																										
Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Sto	☐																																																																																																										
Cuffs	☐	Contamination	☐	Out of Sequence	☐																																																																																																										
Crushing	☐	Countersink	☐	Off-set	☐																																																																																																										
Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐																																																																																																										
Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐																																																																																																										
Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐																																																																																																										
OTHER :		☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence																																																																																																													

NAS1149D0463J Washer 128 Ea (32 ea)
NAS1149D0663J Washer 32 Ea (8 ea)

90-Start up Operation
90-Start up Operation

5092780
5093765

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	AN4-51A	32	136	0
	AN4-6A	64	1,038	0
	AN4C46A	16	213	0
	AN6-12A	32	284	0
	D2570	96	149	0
	D2571	4	4	0
	D2572	4	0	0
	D2573	4	5	0
	D2574	4	0	0
	D2747	16	152	0
	D2876	8	40	0
	D2877	8	42	0
	D3405-041	4	26	0
	D3405-043	4	22	0
	D3407-041	4	13	0
	D3417-5	8	43	0
	D3456-1	4	185	0
	D3533-1	8	119	0
	MS21042L4	96	4,090	0
	MS21043-4	20	892	0
	NAS1149D0463J	128	4,955	0
	NAS1149D0663J	32	1,094	0

Part Specifications

Specifications could not be found.

Plex 10/17/18 10:13 AM Dart.lajeunesse.marie

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval				
Description Work Order Deviation				Disposition							
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due		☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter		FAULT CATEGORY ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes		☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center		☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence	
				OTHER : ☐							